

### Claims

1. A system for control and supervision of residential control in a broadband network (10), characterized in that it comprises at least one of the following features provided by hardware and software broadband network dedicated means (M2, 22, 24, 26, 28, 30):

5 port control by feeding a protocol server (30) for auto-configuration of client network parameters with information from a membership policy server (28) providing that each network customer address can be connected to a unique name of a port for one customer inside the network;

10 class of service assurance for specific types of customer equipment (14) denying attempts to lease additional customer addresses through said protocol server (30) which keeps a record of all assigned addresses to said policy server (28):

forced direction for network login procedure by redirecting a customers browser to a predetermined login procedure when a network connected equipment is turned on, thus providing a controlled way of identifying each customer before using other services;<sup>or</sup>

15 abuse and anti-spoof protection by adjusting boarder gateway control routing tables in real time in respect of said protocol for auto-configuration; and thereby providing services differentiation for customers.

20 2. A system according to claim 1, characterized in that it announces helper addresses as dynamic routes providing instant fail-over if a daemon fails by withdrawing routes from a network service providers boarder gateway control table, whereby a lower prioritized daemon immediately takes control, and which provides that it is impossible for a customer to use an address without leasing it from said protocol server (30).

25 3. A system according to claim 1 ~~or 2~~, characterized in that it adjusts boarder gateway protocol routes to customer devices/equipment (14) in real time according to protocol for auto-configuration of client network parameters, thus enhancing load balancing in network (10) fiber rings.

30 4. A system according to claim 1 ~~or 2~~, characterized in that it comprises real time traffic analyzing detecting unauthorized servers run by a customer and software which provides network address translation.

5. A system according to claim 1 ~~or 2~~, characterized in that said port control controls activation and deactivation of residential access ports.

6. A system according to claim 1 ~~or 2~~, characterized in that said port control provides the assigning of a static network address to a specific port and MAC address.

a 7. A system according to claim 1~~6~~, characterized in that said forced redirection provides forced network portal logins.

a 8. A system according to claim 1~~7~~, characterized in that it provides traffic mediation which enables the system to aggregate Cisco® NetFlow (24) information based on  
5 a residential port.

a 9. A system according to claim 1~~8~~, characterized in that it provides port snooping through display of port information or port link states.

a 10. A system according to claim 1~~9~~, characterized in that it provides network address to residential port logging, which enables to find out who a specific network address  
10 was leased to at a given time, which provides abuse administration in a broadband network (10).  
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